

What is claimed is:

1. A parameter tuning device, comprising:

parameter tuning means for defining chromosomes having a plurality of parameters of a physical model of a semiconductor device as a gene and optimizing the parameters using a genetic algorithm based on characteristic measurement data of a test-manufactured semiconductor device.

2. A parameter tuning device according to claim 1, wherein said

10 parameter tuning means includes generation range deciding means for obtaining a center of gravity of a parent chromosome group in a vector space to determine a generation range of a child chromosome group inside a hyper-polyhedron on a vector space determined from the center of gravity and values of the parent 15 chromosome group in a crossover process in the genetic algorithm.

3. A parameter tuning device according to claim 1, wherein said

20 parameter tuning means includes an evaluation value computing means for obtaining a first evaluation value based on a linear scale and a second evaluation value based on a log scale to make a sum of the first evaluation value and the second evaluation value as an evaluation value of the chromosome in a selection process in the genetic algorithm.

25 4. A parameter tuning device according to claim 1, wherein said parameter tuning means includes normalization for unifying a scale of data in the selection process in the genetic algorithm.

30 5. A parameter tuning device according to claim 1, wherein said parameter tuning means includes search method switching means

for switching to local searching means when a parameter tuning process in the genetic algorithm satisfies a predetermined condition.